IN RE APPLICATION OF:

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EXAMINER: CHANG, K. W.

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FOR: COMMUNICATION TERMINAL APPARATUS

APPEAL BRIEF

COMMISSIONER FOR PATENTS ALEXANDRIA, VIRGINIA 22313

SIR:

This is an appeal from the decision of the Examiner dated January 5, 2004, which finally rejected Claims 1-8 in the above-identified patent application.

I. REAL PARTY-IN-INTEREST

Kabushiki Kaisha Toshiba

II. RELATED APPEALS AND INTERFERENCES

None.

III. STATUS OF CLAIMS

Claims 1-8 are rejected, and Claims 1-8 are being appealed.

IV. STATUS OF AMENDMENTS

All amendments in this application have been entered.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Claim 1 is directed to a communication terminal apparatus capable of receiving information from a communication system network. The apparatus includes receiving means, a display, illumination means, a detector, display control means, and an illumination controller. An exemplary embodiment of the receiving means is the radio section 10 illustrated in Figure 1 and described in the specification from page 9, line 27 to page 10, line 19. A display 71 is illustrated in Figure 1 and described at page 13, lines 16-18. An exemplary embodiment of illumination means is backlight 711 shown in Figure 1 and described at page 13, lines 16-18. Controller 100 of Figure 1 is an exemplary embodiment of a detector, a display control means, and an illumination controller, as described from page 14, line 15 to page 15, line 1.

The apparatus turns on the backlight when displaying information received over the communication system network. As recited in Claim 1, the backlight is turned on when the apparatus detects that reception of information over the network is completed.

Claim 2 is directed to a communication terminal apparatus capable of receiving information from a communication system network. The apparatus includes receiving means, a display, illumination means, illumination detecting means, a detector, display control means, and an illumination controller. An exemplary embodiment of the receiving means is the radio section 10 illustrated in Figure 1 and described in the specification from page 9, line 27 to page 10, line 19. A display 71 is illustrated in Figure 1 and described at page 13, lines 16-18. An exemplary embodiment of illumination means is backlight 711 shown in Figure 1 and described at page 13, lines 16-18. An exemplary embodiment of illumination detecting means is sensor 80 shown in Figure 1 and described at page 14, lines

10-14. Controller 100 of Figure 1 is an exemplary embodiment of a detector, a display control means, and an illumination controller, as described from page 14, line 15 to page 15, line 1.

The apparatus turns on the backlight when displaying information received over the communication system network. As recited in Claim 2, the backlight is turned on when the apparatus detects that reception of information over the network is completed, and the intensity of illumination detected by the illumination detecting means is not more than a predetermined value.

Claim 3 is directed to a communication terminal apparatus capable of receiving information from a communication system network. The apparatus includes receiving means, a display, illumination means, timer means, a detector, display control means, and an illumination controller. An exemplary embodiment of the receiving means is the radio section 10 illustrated in Figure 1 and described in the specification from page 9, line 27 to page 10, line 19. A display 71 is illustrated in Figure 1 and described at page 13, lines 16-18. An exemplary embodiment of illumination means is backlight 711 shown in Figure 1 and described at page 13, lines 16-18. An exemplary embodiment of timer means is timer 100a shown in Figure 1 and described at page 14, lines 15-22. Controller 100 of Figure 1 is an exemplary embodiment of a detector, a display control means, and an illumination controller, as described from page 14, line 15 to page 15, line 1.

The apparatus turns on the backlight when displaying information received over the communication system network. As recited in Claim 3, the backlight is turned on when the apparatus detects that reception of information over the network is completed, and time measured by the timer means falls within a predetermined time period.

Claim 5 is directed to a communication terminal apparatus capable of receiving information from a communication system network. The apparatus includes receiving means, a display, illumination means, display control means, and an illumination controller. An exemplary embodiment of the receiving means is the radio section 10 illustrated in Figure 1 and described in the specification from page 9, line 27 to page 10, line 19. A display 71 is illustrated in Figure 1 and described at page 13, lines 16-18. An exemplary embodiment of illumination means is backlight 711 shown in Figure 1 and described at page 13, lines 16-18. Controller 100 of Figure 1 is an exemplary embodiment of a display control means and an illumination controller, as described from page 14, line 15 to page 15, line 1.

The apparatus turns on the backlight when displaying information received over the communication system network. As recited in Claim 5, the backlight is turned on when the apparatus starts to display the information received over the network.

Claim 6 is directed to a communication terminal apparatus capable of receiving information from a communication system network. The apparatus includes receiving means, a display, illumination means, illumination detecting means, display control means, and an illumination controller. An exemplary embodiment of the receiving means is the radio section 10 illustrated in Figure 1 and described in the specification from page 9, line 27 to page 10, line 19. A display 71 is illustrated in Figure 1 and described at page 13, lines 16-18. An exemplary embodiment of illumination means is backlight 711 shown in Figure 1 and described at page 13, lines 16-18. An exemplary embodiment of illumination detecting means is sensor 80 shown in Figure 1 and described at page 14, lines 10-14. Controller 100 of Figure 1 is an exemplary embodiment of a display control means and an illumination controller, as described from page 14, line 15 to page 15, line 1.

The apparatus turns on the backlight when displaying information received over the communication system network. As recited in Claim 6, the backlight is turned on when the apparatus starts to display the information received over the network, and the intensity of illumination detected by the illumination detecting means is not more than a predetermined value.

Claim 7 is directed to a communication terminal apparatus capable of receiving information from a communication system network. The apparatus includes receiving means, a display, illumination means, timer means, display control means, and an illumination controller. An exemplary embodiment of the receiving means is the radio section 10 illustrated in Figure 1 and described in the specification from page 9, line 27 to page 10, line 19. A display 71 is illustrated in Figure 1 and described at page 13, lines 16-18. An exemplary embodiment of illumination means is backlight 711 shown in Figure 1 and described at page 13, lines 16-18. An exemplary embodiment of timer means is timer 100a shown in Figure 1 and described at page 14, lines 15-22. Controller 100 of Figure 1 is an exemplary embodiment of a display control means and an illumination controller, as described from page 14, line 15 to page 15, line 1.

The apparatus turns on the backlight when displaying information received over the communication system network. As recited in Claim 7, the backlight is turned on when the apparatus starts to display the information received over the network, and time measured by the timer means falls within a predetermined time period.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The ground of rejection to be reviewed on appeal is whether Claims 1-8 are rendered obvious under 35 U.S.C. 103(a) in view of <u>Sakaguchi</u>.

VII. ARGUMENTS

A. Introduction

Claim 5 recites a communication terminal apparatus capable of receiving information from a communication system network comprising:

receiving means for receiving information from the network;

a display configured to display information;
illumination means for illuminating the display;
display control means for causing the display to display
information received by the receiving means; and
an illumination controller configured to cause the

illumination means to illuminate the display, when the display control means has started display of information on the display.

Claim 1 recites a communication terminal apparatus capable of receiving information from a communication system network comprising:

receiving means for receiving information from the network:

a display configured to display information;
illumination means for illuminating the display;
a detector configured to detect completion of
information reception by the receiving means;

display control means for causing the display to display information received by the receiving means, when the detector has detected the completion of the information reception; and an illumination controller configured to cause the illumination means to illuminate the display, when the detector has detected the completion of the information reception.

B. Procedural History

Claims 1-8 were finally rejected in the Office Action dated January 5, 2004.

Examiner Wu and Applicant's representatives, Edward Tracy and Michael Casey, had an interview on April 21, 2004. The differences between Claim 1 and the teachings of Sakaguchi were discussed and a video was shown of the operation of an apparatus as recited in Claim 1. Examiner Wu agreed to reconsider the claims after submission of a formal response.

The Advisory Action dated June 15, 2004 maintained the final rejection of all claims as unpatentable over <u>Sakaguchi</u>, and further stated that automatically turning on the backlight at the end of a voice signal transmission was taught, for example, by U.S. Patent 5,548,832 (<u>Karam</u>). Examiner Wu and Applicant's representatives conducted another interview on July 1, 2004 to discuss the final rejection of Claims 1-8 and the teachings of <u>Karam</u>. At the interview, it was conceded that <u>Karam</u> does not teach automatically turning on the backlight at the end of a voice signal transmission. Accordingly, the present brief does not address <u>Karam</u>.

The Interview Summary further states that "Sakaguchi does not precisely teach a detector for detecting completion of information reception and an illumination controller configured to cause the illumination means to illuminate the display when the detector has detected the completion of information reception."

B. Response to Outstanding Office Action

See Interview Summary dated July 21, 2004 at page 2, lines 2-3 of "Continuation of Substance of Interview."

The outstanding Office Action concludes that Claims 1 and 5 are obvious in light of Sakaguchi based on the following statement in <u>Sakaguchi</u>:

Therefore, the lighting is wasteful when the portable radio apparatus is kept without being used, when it is ready for receiving or transmitting a radio signal, and when the user does not look at the image display section. Thus, it is desirable that a backlight is turned off by means of turning-off means in the above cases so as to save the power of the battery. It is more desirable that the use state information is not displayed to save the battery power while the information is unnecessary.²

1. Factual misunderstanding of teachings of Sakaguchi

The outstanding Office Action alleges without support that "This [teaching of turning off] clearly suggested to turn on the backlight in other use state, such as the time period after completion of the receiving or transmitting (during this time period, the user would need to look at the image display, and Sakaguchi clearly teaches to turn on the backlight in this state)." Applicant understands the Office Action to allege this is a factual suggestion, as opposed to a legal motivation to combine or modify the reference, and have treated it as such herein. Applicant respectfully disagrees with this characterization of Sakaguchi and Sakaguchi's discussion of systems such as in Japanese Laid Open Patent Disclosure (JP-A-Heisei 5-327587, hereinafter called "JP '587").

The above quoted portion of <u>Sakaguchi</u> simply states a known problem, that backlighting of a display of a portable radio apparatus must be minimized to conserve battery power. <u>Sakaguchi</u> restates three conditions apparently disclosed by JP '587 where the backlight should be off: when the portable radio apparatus is kept without being used, when it is ready for receiving or transmitting a radio signal, and when the user does not look at the image display section. It is respectfully submitted that this statement is not a teaching or

²Sakaguchi, column 1, lines 28-36.

suggestion of any solution to the problem, nor an indication of when to turn the light on.

Indeed, the inventions recited in Claims 1 or 5 act contrary to the conditions described in <u>Sakaguchi</u>. The following illustration shows a comparison of the apparatuses recited in Claims 1 or 5 with the teachings of <u>Sakaguchi</u>.

		<u>Sakaguchi</u>			
OFF		Possibly ON		OFF	
Not being used (Radio not transmitting)		Being used (Radio transmitting)		Not being used (Radio not transmitting)	
OFF		Possibly ON		OFF	
Ready to receive or transmit	Re	Receiving or transmitting		Ready to receive or transmit	
OFF		Possibly ON		OFF	
User not looking (Not being used)		User looking (In use)		User not looking (Not being used)	
	<u>s</u>	himizu (Claim 1)		•	
Possibly OFF				<u>ON</u>	
Ready to receive or transmit		Receiving data	Ready to receive or transmit (Displaying received data)		
·	<u>s</u>	himizu (Claim 5)			
Possibly OFF ON					
Ready to receive or transmit Receive	ng data	Displaying and receiving data		Ready to receive or transmit (Displaying received data)	

Each of the three cases in which lighting is taught as being wasteful in <u>Sakaguchi</u> is shown above. <u>Sakaguchi</u> teaches that in each case the light is turned <u>off</u> when the radio is not in use/not transmitting. In contrast, the apparatus recited in Claim 1 turns the light <u>on</u> when it detects the end of information reception and the apparatus recited in Claim 5 turns the light <u>on</u> when it begins display of the information received, as shown in the bottom of the figure.

Further, neither <u>Sakaguchi</u> nor apparently JP '587³ suggest that the light should be <u>on</u> in all circumstances that do not meet the above conditions -- only that the light should definitely be off in these conditions. To turn on the light in all circumstances not meeting the

³To the extent that JP '587 is described in <u>Sakaguchi</u>.

stated conditions would be wasteful of battery power, in direct contradiction to the stated purpose of the invention disclosed by <u>Sakaguchi</u>.

Finally, with regard to the statement in the outstanding Office Action that "Sakaguchi clearly teaches to turn on the backlight in this state," it is respectfully submitted that there is no teaching or suggestion in <u>Sakaguchi</u> to turn the light on in response to anything other than operation of a key by a user. Further, as discussed above, the discussion of JP '587 does not state any time at which the backlight should be turned on -- it only discloses when to turn the light off. It is respectfully submitted that the only place a teaching can be found to turn on the backlight when the display of information has begun or when the completion of information reception is detected is in Applicant's own disclosure.

Accordingly, it is respectfully submitted that the Office Action has overstated the teachings of <u>Sakaguchi</u>.

The claims do not stand or fall together. For the reasons discussed below, Claims 5, 7, 8/5, and 8/7 are separately patentable from Claims 1, 2, 3, 4/1, 4/2, 4/3, 6, and 8/6.

2. Legal test of obviousness for Claims 5, 7, 8/5, and 8/7

With regard to the legal conclusion that Claims 5, 7, 8/5, and 8/7 are rendered obvious under 35 U.S.C. 103(a) in light of <u>Sakaguchi</u>, it is respectfully submitted that a *prima facie* case of obviousness has not been made by the outstanding Office Action.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. See MPEP §2143.03 citing *In re Royka*, 180 USPQ 580 (C.C.P.A. 1974). It is respectfully submitted that <u>Sakaguchi</u> does not teach or suggest "an illumination controller configured to cause the illumination means to illuminate

the display, when the display control means has started display of information on the display" as recited in Claim 5. It is respectfully submitted that the only suggestion for the above-quoted element of Claim 5 comes from Applicant's own disclosure.

The Office Action has utilized hindsight reconstruction to conclude <u>Sakaguchi</u> suggests that the light should be turned on in all other conditions, and thus that <u>Sakaguchi</u> suggests turning on the light when the display begins to display information (as recited in Claim 5). It is respectfully submitted that the suggestion in the outstanding Office Action comes from the Applicant's own disclosure, rather than the prior art. "To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher." W.L. Gore & Associates, Inc. v. Garlock, Inc., 220 USPQ 303, 312-313 (Fed. Cir. 1983).

In fact, <u>Sakaguchi</u> teaches away from the present invention. In discussing systems such as JP '587, <u>Sakaguchi</u> states:

By the way, the above reference has *no significant ideas* as to how the CPU determines whether the portable radio apparatus is kept without being used, it is ready to receive transmission data, or it is communicating. Another problem to be solved remains ... (emphasis added)

Thus, <u>Sakaguchi</u> indicates that there is no "significant" teaching or suggestion in JP '587 of any solution to the stated problem, much less a suggestion for "an illumination controller configured to cause the illumination means to illuminate the display, when the display control means has started display of information on the display," as recited in Claim

⁴Sakaguchi, column 1, lines 50-53.

5.

Indeed, <u>Sakaguchi</u> discloses a portable radio apparatus wherein the backlight is turned on for a predetermined period of time every time a button is pressed, and turned off at the end of this predetermined time. If a button is pressed while the light is on, the time before the light is turned off is reset. After the light is turned off, the backlight is not turned on again without a user's operation.⁵ If the backlight is off during data reception, the user has to operate a key to turn on the backlight and check whether the display of information has begun. Therefore, in <u>Sakaguchi</u>, the user may have to perform key operations many times until the display of information begins -- consuming battery power each time. Thus, <u>Sakaguchi</u> does not solve the problem of eliminating unnecessary battery use, as battery power may be wasted by turning on the display backlight many times.

In contrast, according to the claimed invention, even if the backlight is off during data reception, the backlight is automatically turned on when the display of information begins. Therefore, the user does not have to operate the apparatus keys at all to turn on the backlight, and can avoid any waste of the battery power by unnecessarily turning on the light. There is no such teaching in <u>Sakaguchi</u>.

Accordingly, it is respectfully submitted that <u>Sakaguchi</u> does not teach or suggest an illumination controller configured to cause the illumination means to illuminate the display, when the display control means has started display of information on the display, as recited in Claim 5.

Since <u>Sakaguchi</u> does not teach or suggest each and every element of Claim 5, it is respectfully submitted that Claim 5 and Claim 8/5 dependent therefrom patentably define

⁵See Sakaguchi, column 4, line 54, to column 6, line 23.

thereover.

Independent Claim 7 recites similar elements to Claim 5. It is respectfully submitted that Claims 7 and 8/7 are patentable over <u>Sakaguchi</u> for the reasons discussed above with respect to Claim 5.

3. <u>Legal test of obviousness for Claims 1, 2, 3, 4/1, 4/2, 4/3, 6, and 8/6</u>

In addition to the reasons for patentability set forth above, it is respectfully submitted that Claim 1 is separately patentable from Claim 5, as Claim 1 recites the additional features of a display control means for causing the display to display information received by the receiving means, when the detector has detected the completion of the information reception, and an illumination controller configured to cause the illumination means to illuminate the display, when the detector has detected the completion of the information reception. This recitation of an explicit time for illuminating the display evidences a different or additional detection technique than that recited in Claim 5 -- i.e., detecting when the completion of information reception occurs. Thus, even if Claim 5 were found unpatentable, the Office Action has not established that the specifics of the claimed condition detected by the detector were obvious.

As discussed above, it is respectfully submitted that there is no teaching in <u>Sakaguchi</u> to turn on the light under any conditions other than the user pressing a button. Accordingly, it is respectfully submitted that <u>Sakaguchi</u> does not teach or suggest either display control means or an illumination controller as recited in Claim 1.

Since <u>Sakaguchi</u> does not teach or suggest each and every element of Claim 1, it is respectfully submitted that Claim 1 and Claim 4/1 dependent therefrom patentably define thereover.

Independent Claim 3 recites similar elements to Claim 1. It is respectfully submitted that Claims 3 and 4/3 are patentable over <u>Sakaguchi</u> for the reasons discussed above with respect to Claim 1.

Independent Claims 2 and 6 recite similar elements to Claim 1. It is respectfully submitted that <u>Yoshinori</u> cures none of the above-noted deficiencies of <u>Sakaguchi</u>, and thus Claims 2 and 6 and Claims 4/2 and 8/6 dependent therefrom are patentable over <u>Sakaguchi</u> in view of <u>Yoshinori</u> for the reasons discussed above with respect to Claim 1.

Conclusion

It is respectfully requested that the outstanding rejections be REVERSED.

Respectfully submitted,

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VIII. CLAIMS APPENDIX

1. A communication terminal apparatus capable of receiving information from a communication system network, comprising:

receiving means for receiving information from the network;

a display configured to display information;

illumination means for illuminating the display;

a detector configured to detect completion of information reception by the receiving means;

display control means for causing the display to display information received by the receiving means, when the detector has detected the completion of the information reception; and

an illumination controller configured to cause the illumination means to illuminate the display, when the detector has detected the completion of the information reception.

2. A communication terminal apparatus capable of receiving information from a communication system network, comprising:

receiving means for receiving information from the network;

a display configured to display information;

illumination means for illuminating the display;

illumination detecting means for detecting an intensity of illumination;

a detector configured to detect completion of information reception by the receiving means;

display control means for causing the display to display information received by the

receiving means, when the detector has detected the completion of the information reception; and

an illumination controller configured to cause the illumination means to illuminate the display, when the detector has detected the completion of the information reception, and the intensity of illumination detected by the illumination detecting means is not more than a predetermined value.

3. A communication terminal apparatus capable of receiving information from a communication system network, comprising:

receiving means for receiving information from the network;

a display configured to display information;

illumination means for illuminating the display;

timer means for measuring time;

a detector configured to detect completion of information reception by the receiving means;

display control means for causing the display to display information received by the receiving means, when the detector has detected the completion of the information reception; and

an illumination controller configured to cause the illumination means to illuminate the display, when the detector has detected the completion of the information reception, and time measured by the timer means falls within a predetermined time period.

4. The communication terminal apparatus according to any one of claims 1 - 3, further

comprising:

sound generating means for generating a sound; and

sound generation control means for causing the sound generating means to generate the sound to inform a user of the completion of the information reception, when the detector has detected the completion of the information reception.

5. A communication terminal apparatus capable of receiving information from a communication system network, comprising:

receiving means for receiving information from the network;

a display configured to display information;

illumination means for illuminating the display;

display control means for causing the display to display information received by the receiving means; and

an illumination controller configured to cause the illumination means to illuminate the display, when the display control means has started display of information on the display.

6. A communication terminal apparatus capable of receiving information from a communication system network, comprising:

receiving means for receiving information from the network;

a display configured to display information;

illumination means for illuminating the display;

illumination detecting means for detecting an intensity of illumination;

display control means for causing the display to display information received by the

receiving means, when the detector has detected the completion of the information reception; and

an illumination controller configured to cause the illumination means to illuminate the display, when the display control means has started display of information on the display, and the intensity of illumination detected by the illumination detecting means is not more than a predetermined value.

7. A communication terminal apparatus capable of receiving information from a communication system network, comprising:

receiving means for receiving information from the network;

a display configured to display information;

illumination means for illuminating the display;

timer means for measuring time;

display control means for causing the display to display information received by the receiving means; and

an illumination controller configured to cause the illumination means to illuminate the display, when the display control means has started display of information on the display, and time measured by the timer means falls within a predetermined time period.

8. The communication terminal apparatus according to any one of claims 5 - 7, further comprising:

sound generating means for generating a sound; and sound generation control means for causing the sound generating means to generate

the sound to inform a user of the completion of the information reception, when the display control means has started display of information on the display.